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"Hands On" Review Of Commodore 128

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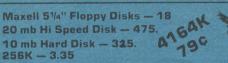
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ATARI

Applying The Atari

by Jeff Brenner

Our feature program this month is a long one and will take some time to type in, but I think you'll enjoy it. I had to forcefully pull myself away from playing with it so I could write this month's column. Before we discover what this program is, let's answer some reader mail and take care of a few other matters.

Reader Mail

Q. I have an Atari 800XL, the AtariWriter cartridge and a Gorilla Banana Printer. I understand there is some sort of utility floating around (a driver routine?) that makes the AtariWriter cartridge and the Banana more compatible. If you know anything about it, I would appreciate some information.

> Jim Cassoutt Pensacola, FL

Originally, Atari was to distribute these "printer driver routines" for various printers through the Atari Program Exchange. However, the Atari Program Exchange has long been shut down and Atari users have since been complaining that they are unable to get these routines.

But there is still hope. A company called At-A-Glance (86 Ridgedale Avenue, Cedar Knolls, NJ 07927) produces a "Printer Formatted Data Disk," essentially the driver routine you are interested in. The price is \$14.95. The company claims that this program "will give you all the available options possible with your printer and AtariWriter.' Their ad lists the availability of versions for the following dot-matrix printers: "BMC, C-ITOH, EPSON, GEMINI, LEGEND. OKIDATA, PANASONIC. ATARI, RITEMAN, CITIZEN, plus others." Hopefully, the "plus others" includes your Banana

I recommend that you write a letter to them before ordering to see whether a version is available specifically for your model.

Q. My wife and I have recently gotten involved in doing lineage charts (genealogical trees) of our families and realized it would be so much simpler to do this on our computer (Atari 800XL).

Somewhere I remember seeing some software just for that purpose, but was disappointed to find it was for a computer other than my Atari. It may have been for a Commodore 64 but I'm not exactly sure of that. However, if you know of one for the Atari, please let me know or ask your readers if they know of such a program.

Darwin K. Garrison Lee's Summit, MO

Although I have seen several genealogical programs for other computers, I am sorry to say I am not familiar with any available for the Atari. The following companies have produced genealogical software for other computers:

Acorn Software Products, 7655 Leesburg Pike, Falls Church, VA 22043: Family Tree

Array Systems, P.O. Box 295, Brigham City, UT 84302: Treesearch

Comsoft, 655 Maybell Avenue, Palo Alto, CA 94306: Roots

Quinsept, P.O. Box 216, Lexington, MA 02173: Family

Soft-Gene, 11 John Swift Road, Acton, MA 01720: Ancestry

Wagstaff Computer Services, 1050 E. 800 South, Provo, UT 84601: Family Ties

Most of these addresses are more than a year old, and in that time versions might have been developed for the Atari. (Several of these companies have probably gone out of business during this time as well.) I recommend that you write to these companies and ask if an Atari version is available

You also might be interested in the following companies:

Data Transfer Associates, Inc., 5102 Pommeroy Drive, Fairfax, VA 22032, (703) 938-8490: Publishes bimonthly newsletter, Genealogical Computing National Genealogical Socie-

ty's Computer Interest Group, 1921 Sunderland Place, NW Washington, DC 20036 Posey Enterprises, P.O. Box

338, Orem, UT 84057, (801) 374-6168: Publishes quarterly Genealogical Computer Pioneer

If any readers produce or know of a genealogical pro>I'M CHECKING TO SEE IF YOU WORK PROPERLY. RAP: FOR HOW LONG HAVE YOU BEEN CHECKING TO SEE IF I WORK PROPERLY?

>YOU'RE BEING GUDTED FOR A MAGAZINE.
RAP: WHY DO YOU THINK I AM BEING GUOTED FOR A MAGAZINE?

>BECAUSE I'M DOING THE QUOTING!
RAP: IS IT REALLY BECAUSE YOU'RE DOING THE QUOTING?

>YES IT IS. RAP: ARE YOU CERTAIN?

>1'M ABSOLUTELY POSITIVE.
RAP: ARE YOU WORRIED BECAUSE YOU ARE ABSOLUTELY POSITIVE?

>WHAT DO YOU MEAN? RAP: WHAT DO YOU THINK DO I MEAN?

>YOU GOT ME - DO YOU MIND IF I PRINT WHAT YOU ARE SAYING? RAP: DO YOU THINK I KNOW WHAT I AM SAYING?

>THAT'S TRUE - YOU ARE A COMPUTER PROGRAM.
RAP: HAVE YOU EVER WANTED TO BE A COMPUTER PROGRAM?

>NEVER! RAP: NEVER AT ALL?

>THAT'S RIGHT.
RAP: THAT IS INTERESTING - GO ON.

>CAN YOU THINK? RAP: DO YOU THINK I CAN THINK?

>THAT'S WHAT I AM TRYING TO FIND OUT. RAP: WHAT DO YOU THINK YOU ARE TRYING TO FIND OUT?

>I WANT TO SEE IF YOU CAN IMITATE HUMAN INTELLIGENCE.
RAP: WHAT IF YOU CAN'T GET TO SEE IF I CAN IMITATE HUMAN INTELLIGENCE?

>THEN I MAY GET MAD AT YOU. RAP: IT'S UNHEALTHY TO BE ANGRY OFTEN.

>I SELDOM GET ANGRY. RAP: WHAT DOES ANGER DO TO YOU?

>I DON'T WANT TO DISCUSS THIS IN FRONT OF MY READERS.
RAP: ARE YOU SURE YOU DON'T WANT TO DISCUSS THIS IN FRONT OF YOUR READERS?

>ABSOLUTELY SURE - INSTEAD I WANT TO GO FINISH MY COLUMN. RAP: IS THAT WHAT YOU REALLY WANT?

>YES, SO GOODBYE! RAP: IT'S BEEN A PLEASURE TALKING WITH YOU.

Figure 1 "Conversation with RAP."

gram for Atari computers, please write and tell us.

Q. I've been having some problems with Atari's customer service. The problem concerns

their form letter and nonresponse, mostly. I bought a 130XE and I asked them simply how to access the additional

Continued on page 60

Tinka's Mazes

A Review by Jeff Brenner

Tinka's Mazes is one of the newest releases in Mindscape's Tink!Tonk! line of educational software. This program concentrates on developing basic mathematics skills, such as counting and addition. Like the other programs in the Tink!Tonk! series, Tinka's Mazes has demonstrated itself to be not only a valuable educational tool for the four- to eight-year old, but a charmingly entertaining piece of software as well.

Getting Ready for School

In Tinka's Mazes, your child uses the joystick or keyboard to control Tinka, a small, colorful character from TinkTonk Land. After a lengthy introduction, Tinka's bedroom is displayed complete with Tinka sleeping in bed in the center of the room. Pressing the space bar awakens Tinka, and the animated character jumps out of bed and races off to school. But there are two ways for Tinka to get to school, and your child has the choice: Tinka can go directly to school or through a maze of mathematics problems. Successfully navigating through the maze brings Tinka to school.

Skill Levels

As an educational program, one of the nicest features of Tinka's Mazes is its multiple difficulty levels. Three skill levels are on the first side of the disk, and an additional skill level is on the back. These help to ensure that your child will

not quickly outgrow the program; as the child becomes more proficient at the skills presented, he can advance to the next difficulty level.

Level one deals with "less" and "more" problems. Two quantities of objects are displayed and the child is asked to choose which is more or which is less.

Level two concentrates on counting skills. Generally, a certain number of items are presented on the screen and the child is asked to type in the number that follows.

Level three presents additional counting problems and also drills your child on simple addition problems.

Level four contains varying skill levels within itself. This level basically drills your child on addition problems but a time aspect is added to the game. The child must finish the maze in a certain amount of time to gain points and to advance to a higher grade level at the school.

Through The Maze

If your child chooses to go through the maze, he will have to open "gates" to make his way to the end while avoiding the fast-moving "mazers" (on Level 4). A gate is opened by moving the Tinka character on top of it and answering the problem mathematics presented. Depending on the skill level being played, a "more" or "less" problem, a counting problem, or an addition problem will be presented using animal characters. On level three, for example, a

Continued on page 104

Applying The Atari Continued from page 59

memory that they have advertised and how to use it with their AtariWriter program. The reason I bought a 130XE was because I wanted the additional memory to keep more pages at a time in the computer. They sent me a form letter with the address of Atari associations in my area and no further response. I really got upset at that point and wrote a letter to the president and told him that I thought their "there's 130K available but you can't use it" philosophy was false advertising and Consumer Reports and the Federal Trade Commission ought to know about it. I got another "the user associations in your area are as follows:" form letter about one month later-really user-unfriendly if you compare this with their former helpfulness.

So much for preamble. Can you help me--how do you get the full 130K. I don't understand their instructions in their manual.

> Terry Joslin Oakton, VA

It is unfortunate that it is so difficult to correspond with Atari, but you are one of the lucky ones. Many readers have complained that they have not received any response--not even a form letter. Ironically, calling Atari by phone gives a recording which tells the caller that the phone lines are too busy and suggests that the caller mail in his question. I had hoped that once Atari settled down with its new management, its toll-free "help" line would be set up again. But the new Atari has apparently remained negligent in the area of consumer support and I do hope this changes in the future.

Regarding your questions about the 130K RAM in the 130XE, the full 130K is indeed in your machine and 64K of it can be used as a RAM "disk drive." You can save data or programs to this area and then access them when desired. I intend to cover various aspects of Atari's newer computers in a future column.

Since AtariWriter was not designed with the 130XE in mind, it cannot access the additional memory. Therefore you must wait until a word processor is released that is compatible with the 130XE. AS of this writing I know of no 130K word processors for the Atari 130XE, but will inform you if I hear of one being developed.

Newsletters

I recently received two more

well-designed newsletters from Atari user's groups. One is *Pokey*, printed by the Western New York Atari User's Group (P.O. Box 59, Buffalo, NY 14216). The other is Bits, Bytes & Pieces Computer Digest printed by the Bits, Bytes, & Pieces Atari user's group (1103 Arrowbend Drive, Williamson, NY 14589). If your user's group prints a regular newsletter, send it in and I'll try to mention it.

Contributions

Readers are invited to submit short, original programs from which others may benefit. All readers whose contributions are printed will receive 3-D holograph stickers. Additionally, this month I have two cartridge games from Sega and from Epyx for the best original programs that are received and published. If you have any nifty little programs of your own creation that others will enjoy, send them in!

Numeric Keypad Decoder

Several readers have requested an assembly listing of July's numeric keypad program. It is listed under the 'Numeric Keypad Decoder Assembly Listing" heading for those who want to modify it for use with machine language programs, or for those simply interested in seeing more clearly how it works.

Mailing List Update

I've gotten such a fantastic response to June's Mailing List program from readers who are using it that we'll begin adding more features to this program next month to make it even more practical. So far only one minor bug has surfaced. When searching for a name that does not exist, an error message will be generated. Add the following line:

935 TRAP 1000

This will cause the program

NUMERIC KEYPAD DECODER ASSEMBLY LISTING

; Load X with high byte of START. : Load Y with low byte of START.

; Check if ESCAPE pressed.

; Set vectors to point to START address.; Return to BASIC.

; IF TRIGO=0 then key has been pressed.

Otherwise key is released - store zero in FLAG.

Jump to end.

If FLAG-O then last key has been released.

Ready to read next key.

Cannot read key yet - Jump to the end.

Set flag to non-zero value since key is pressed.

Check which key is pressed.

NUMERIC KEYPAD DECODER ASS

10 \$=\$600

20 ; NUMERIC KEYPAD DECODER
30 ; (C) 1785 JEFF BRENNER
40 PORTA-54016
50 PORTI-53761
60 TRISO-53264
70 SETUBV-58460
80 XITVBV-58466
90 CH-764
0100 FLAS-204
0110 PLA
0120 LDX \$START1/256 ; I
0130 LDY \$START1/256 ; I
0150 JSR SETVBV
0160 RTS ;
0170 START LDX TRISO
0180 BEQ PRESSED ;
0190 DEX
0200 STX FLAS ;
0210 JHP END ;
0220 PRESSED LDA FLAS ;
0240 BNE END ;
0240 BNE END ;
0250 READKEY INC FLAS ;
0260 LDA PORTA ;
0270 AND \$15
0290 TAX
0290 LDA PORTA ;
0290 LDA POT1
0300 CHP \$1
0310 BEQ NOESC
0320 LDX \$16
0330 NOESC LDA DATA, X
0340 STA CH
0350 END JMP XITVBV
0360 DATA BYTE O
0370 LEND

to print a "Name not found" message instead, and will allow you to continue. Some readers who have requested diskettes of this program will find that this line has already been added to the program.

Response Analysis Program

Now the program that we've all been waiting for. It's called the Response Analysis Program, or RAP for short. It requires a minimum of 24K RAM.

Inspired by the program, Eliza, which was created at the Massachusetts Institute of Technology way back in 1966, RAP will sometimes startle you with apparently intelligent responses to your statements, or will make you laugh with its hilarious retorts. Eliza was a computer psychotherapist; RAP is the center of a rap session. Some have found that "talking" to such a program (as ridiculous as it sounds) has actually helped them to relieve some pressures and tensions.

Figure 1 gives you an idea of what RAP is all about. This is a sample conversation between me and the program. My entries are preceded by ">" while the program's responses are preceded by "RAP:." You can obviously have a lot of fun with this program.

The program has been divided into two parts, Part I (lines 10 through 1350) and Part II (lines 4960 through 5590) both with the heading, "Response Analysis Program. RAP is a long program, so you might want to enter it in over a period of several days. It's a good idea to use Program Perfect to enter this program to avoid making errors which will affect its operation. (See the end of this article for information on Program Perfect.)

Type in both parts of RAP. If you are using Program Perfect, first enter Part I. Then list this part to cassette or disk (LIST "C:" or LIST "D:PART1"). Now type NEW (LIST and reload Program Perfect.

Type 4960 for the "Starting line" prompt and begin entering Part II. When this part is completed, merge Part I with it by entering Part I from cassette or disk (ENTER "C:" or ENTER "D:PART1"). Now the entire program will be in memory, and you can SAVE it

to cassette or disk (CSAVE or SAVE "D:RAP.BAS"). You can also delete the Part I file from disk once you have saved the completed program.

RUN the program. The first display is the title screen,

Continued on page 104

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### MEMORY AND YOU CAN SAVE IT CONTINUED ON page 104

### ARE PROPOSE AND LYSIS PROGRAM — PART X

### PROPOSE AND LYSIS PROGRAM — PART X

### PROPOSE AND LYSIS PROGRAM

### 128 PRO CONTRICT 1703 2575 EMBERGE PROGRAM

### 20 PRO CONTRICT 170 2575 EMBERGE PROGRAM

### 20 PRO PROCESS AND LANGUAGE PROGRAM

### 20 PROCESS AND LA
                                                                                                                                                    RESPONSE ANALYSIS PROGRAM - PART I
                                                          J 1118 RAPS=OLDS(1, LEN(OLDS)-2):RAPS(LEN(RAPS)+1)=CHRS(32)
J 1128 RAPS(LEN(RAPS)+1)=DLDS(LEN(OLDS)):OLDS=RAPS:GOSUB 420:GOTD 630
J 1136 RAPS(LEN(RAPS)+1)=DLDS(LEN(OLDS)):OLDS=RAPS:GOSUB 420:GOTD 630
J 1136 RAPS="YOU ARE REPEATING YOURSELF."
J 1150 GOSUB 420:GOTD 630
J 1160 RAPS="SAME TO YOU, BUSTER!":GOSUB 420:GOTD 630
J 1160 RAPS="SAME TO YOU, BUSTER!":GOSUB 420:GOTD 630
J 1170 RAPS="SPEED NOW AT ":RAPS(LEN(RAPS)+1)=STRS(DELAY)
J 1180 GOSUB 420:GOTD 630
J 1200 DATA 5000, REY-KEY-KEYS:RESTORE 1350:READ LINE,TMPS:GOTD 1060
J 1200 DATA 5000, REY-VOL 9605, MOULD YOU,500, MHY DONT YOU,5070, MHY SHOULD I
J 1210 DATA 5000, MHY CANT I,5070, I DONT,5100, I CANT,5110, I MILL NOT, I WONT
J 1320 DATA 5160, I WANT 10,5170, I WANT,5100, I LIKE,5170, I THINK
J 1240 DATA 5160, I MANT TO,5170, I WANT,5100, I LIKE,5170, I THINK
J 1240 DATA 5160, I MANT TO,5170, I WANT,5100, I LIKE,5170, I LOULD,5200, I WOULD
J 1250 DATA 5210, I HATE,5220, I WISH,5230, HHO,5240, WHAT,5250, WHEN
J 1240 DATA 5360, WHERE,5270, MHY,5280, HOW,5270, NEVER,5300, SOMETIMES
J 1270 DATA 5310, USUALLY,5320, ALMAYS,5330, MAYBE,5340, CAUSE
J 1280 DATA 5360, PUS S,5360, NO,5370, SAD,5380, HAPPY,5350, ANGRY, MAD
J 1290 DATA 5460, FAMILY, KISD, IFE, HUSBAND, CHILD, SPOUSE, FATHER, MOTHER
J 1360 DATA 5460, FAMILY, KISD, J470, MOVIE, 5460, BOOK
J 1320 DATA 5460, FAMILY, KISD, J470, MOVIE, 5460, BOOK
J 1330 DATA 5470, POLTOR, BOSS, MUSIC, 5510, SPORT, 5520, MONEY, 5530, COMPUTER
J 1340 DATA 5460, FAMILY, KISD, J470, MOVIE, 5460, BOOK
J 1330 DATA 5470, POLTOR, BOSS, MUSIC, 5510, SPORT, 5520, MONEY, 5530, COMPUTER
J 1340 DATA 5460, FAMILY, KISD, J470, MOVIE, 5460, BOOK
J 1330 DATA 5470, POLTOR, BOSS, MUSIC, 5510, SPORT, 5520, MONEY, 5530, COMPUTER
J 1340 DATA 5540, DOCTOR, BOSS, MUSIC, 5510, SPORT, 5520, MONEY, 5530, COMPUTER
J 1340 DATA 5540, DOCTOR, BOSS, MUSIC, 5510, SPORT, 5520, MONEY, 5530, COMPUTER
J 1340 DATA 5540, DOCTOR, BOSS, MUSIC, 5510, SPORT, 5520, MONEY, 5530, COMPUTER
J 1340 DATA 5570, BOST, MIST, STORT, MOVIE, 5400, BOOK
J 1350 DATA 5540, DOCTOR, BO
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group of animals marches onto the screen and the program asks, "HOW MANY?" After answering this question, some more animals appear on the screen and the program asks,

"NOW HOW MANY?" On all the skill levels, a correctly answered question is greeted with a high-pitched beep, while an incorrect answer is met with a low-pitched buzz and a "TRY AGAIN" prompt. If the child incorrectly answers two times in a row, the correct

get to school. At School

The school part of Tinka's

Mazes is almost a whole new answer is displayed. A correct answer opens the program in itself. Your child gate and allows the child to can choose to stay in the classroom and take a proceed through the naze. It is necessary to pass through mathematics quiz, or to go on nine of these gates for Tinka to a field trip on which skill reinforcing games are played.

The quiz is taken on a "blackboard" on the screen.

First, answer in one sentence at a time. Longer sentences are preferable since they give RAP more to work with. Unlike other BASIC artificial intelligence programs, there will not be any significant increase in the amount of time the program takes to respond with longer sentences. Since RAP uses a machine language The type of quiz given once again depends upon the skill level being played. For example, the child may have to count a number of scissors, rocket ships, books, monsters, and other objects (Level 2), or he may have to add up

Continued on page 105

for key words, both short and long sentences will take approximately the same amount of time to be processed; about seven seconds. But don't go overboard; sentences longer than three lines will not be entered properly. Entering more than one sentence at a time or run-on sentences will make RAP more likely to give you a nonsensical response. Note that the screen goes blank while RAP thinks. This helps to speed up its response.

Second, RAP is more suited to understanding what you feel and what you do. It won't necessarily understand if you talk about what your brotherin-law is doing, for example.

Third, the speed with which RAP "types" out its characters can be changed by typing "SPEED =" followed by a number from zero through 30. Zero is the fastest speed and eliminates the "typewriter" effect. Numbers above 30, such as 4000, will make you wait days for a response, so keep the number under 30. RAP will print out a confirmation of the new speed. The speed of processing your responses in not affected; only the speed at which the characters are printed is changed.

Fourth, be careful of what you say to RAP. Computer circuitry is extremely sensitive. Have fun!

Next Month

We'll learn all about the workings of RAP and how to add additional key words and responses. We'll also enter a few routines for June's Mailing List program, and we'll take a look at some more reader mail.

Reader's questions, comments and original contributions are welcome. Please enclose a self-addressed, stamped envelope (SASE) for a personal reply.

A cassette or diskette of the programs listed in this month's column is available from the author for \$7.00, postpaid. Specify DOS 2 or DOS 3; when requesting a diskette.

Program Perfect is a utility used to check for typing errors in programs entered from this column. Readers may send a SASE for a listing or \$5.00 for a cassette or diskette of this program.

Address all correspondence

Jeff Brenner's "Applying The Atari 9/85" c/o Computer Shoper P.O. Box F Titusville, FL 32781-9990 •

Applying The Atari Continued from page 60

designed with the help of a slightly modified version of last month's light pen program. You can press START at any time while this screen is being drawn to get to the next screen. Here you are asked if you want to record your conversation on a printer. It can be tremendously entertaining to look back at an entire conversation. Type Y or N for this prompt. If you don't have a printer, of course, you cannot get a printout--sorry.

Now RAP will give you a few introductory statements and will display the triangle can say whatever you like; discuss a problem, talk about your fears, ask questions about the program itself, etc. RAP will do its best to respond to your statements. Remember, though, that RAP is just a computer program, so be forgiving with its occasional awkward grammatical use. There are a few "rules" to know when using RAP.

prompt for your input. You

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(RAP.

Subroutine to search (RAP.)

Subroutine to subrout (RAP.)

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Subroutin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      subroutine to search your input
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Digital Vision, Inc. Announces Video Acquisition System For Atari Computers

Digital Vision, Inc., announces the introduction of COMPUTEREYES, the company's ultra-low-cost video acquisition system for the Atari 800, 800XL, and 130XE series of personal computers. Priced at only \$129.95, COM-PUTEREYES represents the first cost-effective means of capturing real-world images on the Atari's high resolution graphics display. And for just \$399.95, a complete system including COMPUTEREYES and a high-quality video camera is available.

COMPUTEREYES is an innovative slow-scan device that plugs into the Atari's two Game Ports and easily connects to any standard video source (videotape recorder, video camera, videodisk, etc.). Under simple software control, a b/w image is acquired in less than six seconds. A unique multi-scan mode also provides realistic grey-scale images. The accompanying images are

printer screen dumps of images acquired by the system.

Many of the applications of COMPUTEREYES are obvious. These include pattern recognition, security, quality control, spatial measurement, robotics and artificial intelligence, industrial controls, computer art, education, and entertainment. Other applications are bound to surface, once the product is in the hands of the creative members

of the personal computer community.

Comprehensive software is provided with the system and includes: machine language image capture routines; a menu-driven executive that provides everything even firsttime users need to capture images; and image save-to-disk capability. Images can be acquired in either Graphics B (high-resolution) Mode or Graphics 7.5 (four intensity level) Mode, and are thus compatible with such popular image processing programs as Atari Artist and the Koala Pad. Support for other packages, such as Print Shop, will be available soon. To encourage application development and promote ease of use, the soft-

For further information, please contact: Digital Vision, Inc., 14 Oak Street, Suite 2, Needham, MA 02192, (617) 444-9040 or (617) 449-7160.

package includes interface

module, complete easy-to-use

software support on disk,

owner's manual, and one year

warranty. The system is cur-

rently available for the Atari

800/800XL/130XE series, with

single- or double-density disk

drive. COMPUTEREYES is

the Atari version of Digital Vi-

sion's successful video acquisi-

tion system for Apple II series

and Commodore 64/128 com-

puters. All products are

available for immediate delivery. Versions for other

popular computers will be

available in the near future.

Mention that you read about

Tinka's Mazes Continued from page 104

numbers presented on the blackboard (Level 3). On any of the levels, the "teacher' rewards correct answers by doing a dance, and nods disapprovingly when an incorrect answer is given. Getting all ten answers correct makes the teacher dance, jump in the air, or flip her wig.

Field Trip

On the field trip, the child can select to play one of five animal games, with elephants, mice, bees, crabs, or fish. The games are intrinsically the same except that the animals, and the actions of the animals, are different. Each game exercises the concepts that the particular skill level is trying to reinforce. On level two, for instance, a group of elephants, mice, bees, crabs or fish is displayed and the child is ask-"WHAT NUMBER COMES NEXT?" Typing the number that follows the displayed quantity of animals is rewarded with the elephants joining tails, the mice scurrying away at the sight of a cat, the bees buzzing in, the crabs waving their claws, or the fish blowing bubbles.

Packaging and Documentation

All the Tink!Tonk! programs are packaged in an at-

New atari Computers . Indus GT Disk Drive Happy 1050/810 enhancement Happy-Atari 1050 Disk Drive ... Atari 1050 Disk Drive ICD 1050 Density Doubler OMNIMON/RAMROD XL ... OMNIVIEW XL 80 column screen Teknika MJ10 Color Monitor . . . MPP 1150 Printer Interface Star SG10 NLQ Printer \$239 1030 Modem Upload/Download \$75 FREE SOFTWARE WITH DRIVE PURCHASE CALL OR WRITE FOR PRICE LIST ADD 2% S&H (Min \$3) 4% VISA/MC **DYSCOM COMPUTERS** 162 Plyley's Ln., Chillicothe, OH 45601 614-772-6956 9-9 ES

tractive hard-plastic case. The documentation 24-page booklet is excellently written and thorough, explaining each skill level in a separate section. A "Game Plan" section gives helpful hints on playing the game, and a unique "Off-Screen Activities" section recommends activities you can perform with your child to reinforce the skills presented in Tinka's Mazes.

Conclusions

My only complaints of Tinka's Mazes concern the several-second loading delay which takes place between screen changes and an occasional annoying repetition of short tunes. Aside from this, Tinka's Mazes is a welldesigned educational program. The educational concepts are presented with animated graphics in a game-form that children enjoy. And the varie-

ty of skill levels ensures that your child will get good use out of the program.

Requires:

Atari 400/800/XLIXE: 48K, disk drive

Commodore 64: Disk drive 1 Joystick (optional) Program author:

Mercer Mayer Price: \$39.95

Warranty:

90 days, free replacement Manufacturer:

Mindscape, Inc. 3444 Dundee Road Northbrook, IL 60062

RATINGS FOR TINKA'S **MAZES**

Documentation ****

Fabric

Carbon Film (Multistrike or Correctable)

PANASONIC KXP-1090-1091-1092-1093

BROTHER HR-15-25-35

COMREX DX-15, II

POOR, ** FAIR, *** GOOD, ****EXCELLENT Design *** Amusement level *** Value * Average ***



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C ITOH Prowriter 1550-8510, NEC 8023-8025, APPLE DMP-IMAGEW	1/2 x 18	\$15/2	\$42/6	\$ 78/12	\$7/1	\$6 ea 2 or more	\$15/3 \$54/12	\$288/72
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RADIO SHACK-TOSHIBA-COMMODORE-PANASONIC-RICOH Carbon Film - DWP 210 (Hytype II)	5/16 x 145 1/4 x 145 1/4 x 130 5/18 x 17 NOT EZ LOAD 1/4 x 25 Inker Loop 1/2 x 20 5/16 x 14 1/2 x 20 1/2 x 20 9/16 x 16 1/2 x 15 1/2 x 14 1/2 x 14 1/2 x 20 1/2 x 30	\$18/3 \$18/3 \$21/3 \$18/2 \$18/2 \$18/2 \$18/2 \$15/2 \$22/2 \$15/2 \$15/2 \$22/2 \$15/2 \$15/2 \$18/2	\$60/12 \$60/12 \$72/12 \$51/6 \$51/6 \$51/6 \$42/6 \$42/6 \$42/6 \$42/6 \$42/6 \$42/6 \$51/6 \$51/6	\$342/72 \$342/72 \$420/72 \$ 96/12 \$ 96/12 \$ 96/12 \$ 78/12 \$ 78/12 \$ 78/12 \$ 78/12 \$ 78/12 \$ 78/12 \$ 96/12	\$5 ea 3-11 \$5 ea 3-11 \$6 ea 3-11 \$8/1 \$8/1 \$7/1 \$7/1 \$7/1 \$7/1 \$7/1 \$7/1 \$7/1 \$7	\$4 ea 12 or more \$4 ea 12 or more \$5 ea 12 or more \$7 ea 2 or more \$7 ea 2 or more \$6 ea 2 or more \$7 ea 2 or more	\$21/3 \$78/12 \$15/3 \$54/12 \$15/3 \$54/12	2 \$234/72 \$234/72 \$432/72 \$432/72 \$432/72 \$2 \$288/72 \$288/72 \$288/72 \$288/72 \$288/72 \$288/72 \$288/72 \$288/72 \$288/72 \$288/72 \$288/72 \$288/72 \$288/72
COMMODORE 8023P, CENTRONICS 152-2	1/2 x 12	\$14/2	\$36/6	\$ 66/12	\$7/1	\$6 ea 2 or more	\$15/3 \$54/12	\$288/7
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Page Designer

by Jeff Brenner

**1/2

Page Designer, a new release from XLENT software, allows the user to combine various type fonts and graphics to create signs, report covers, letterheads and the like. Sounds familiar? Shades of Broderbund's The Print Shop? Michael Barnes, Vice President of XLENT Software, says that Page Designer was produced independently of The Print Shop, however, he suggests that my readers might "be interested in a list of features of the \$45.00 Print Shop compared to the \$29.95 Page Designer."

While Page Designer and The Print Shop appear similar from their general descriptions, the differences between the two are great and many. Therefore, one will probably suit your particular needs much more effectively than the other. This review will cover the features of Page Designer and its advantages and limitations when compared with The Print Shop.

What You See Is What You Get

One of the nicest features of Page Designer is that its display shows you almost exactly what you are going to get on the printed page. There is little need to question about posioverlaying tioning or characters onto illustrations since you put everything where you want it. All is not completely marvelous, however, since Page Designer can't fit an entire page onto one graphics screen. It allows you to see and design the whole page by using a top and a bottom screen. You can only view or work with one of these screens at a time, but you can freely go back and forth between the two. I did run into a few problems with

two-screen design, however, which you shall soon hear about.

Numerous Type Styles

Included on the Page Designer disk are seventeen character fonts. That's a generous selection, although a few of the fonts look like duplicates of others, with

maybe a few indistinguishable nuances. Unlike the fonts offered by The Print Shop, Page Designer's character sets support lower-case letters.

Merging Graphics

Here's where Page Designer has another advantage. Screens

Continued on page 154

Weber Systems' Continued from page 148

DOR.BAS and CHECK.BAS for maintaining a file of vendors and generating checks in an account payable package.

Disk #4 contains CUSTOMER.BAS and IN-Disk contains VENT.BAS in an accounts receivable package. Product inventory includes a description, stock number, quantity on hand, quantity on order and unit price.

Disk #5 is a mailing list program called FLIPFILE.BAS. It stores addresses and phone numbers, and prints any or all on labels or as a list.

Disk #6 contains a number

of programs. Chart of Accounts (CHARTACC.BAS) holds account name, number and description for up to 1000 entries, sorts them, then prints them as a list or on labels.

PHONE.BAS is a computerized phone directory of addresses and phone numbers, for printing as a list or labels.

BREAK.BAS provides a break-even analysis to determine the price that should be charged for a product, using information you supply. It calculates the number of production units required to crossover from loss to profit-the break-even point.

METRIC.BAS calculates metric conversions, and FUNCTS.BAS provides a wide range of trigonometric and hyperbolic math values.

The appendices include some information from the MBC User's Handbook--a table of character codes and four pages of BASIC error messages, with their meaning and causes.

I have mixed feelings about these programs. I ran MEMOPAD without difficulty, but found FLIPFILE crashed when initialized with the 1600 records the text indicated were allowed. I was able to initialize 1000 records. then found that only three structured lines were allowed per label--with no room for a

company name. Also, the record listing used three lines, just like a label, rather than the single line per record you might expect. I haven't tried the other programs at this writing, but suspect the 1600 records claimed in the text for many programs may not be available with one doublesided 360K disk.

The listings are well commented with remarks and are listed in structured fashion, making them relatively easy to follow (and therefore modify). Most of the programs make extensive use of random disk files, and can be used as a tutorial for this purpose.

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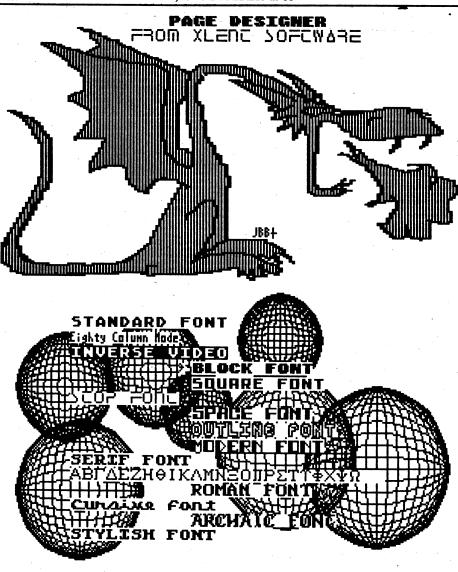


FIGURE 1

Page Designer Continued from page 151

created with a graphics software package (such as Micro-Painter or MicroIllustrator files converted with an included conversion routine) can be loaded into Page Designer and placed on the top or bottom half of the page. You can then add text to this illustration in various type styles as you please. The illustration, as well as any text, can be moved left or right one text-height line at a time by using the insert and delete keys. However, there is no way to move the image up and down, which is a shame; the program does not respond the SHIFT-INSERT and the SHIFT-DELETE key combinations. Moving the screen up or down would not have required any overwhelming programming effort, yet would have given the user an enormously useful feature. As it is how, an illustration which starts at the top of the screen cannot be moved down if you wanted to add text above it.

Adding Text

Text is positioned on the screen using the conventional Atari editing system, except the SHIFT-INSERT and SHIFT-DELETE key combinations are not recognized, as mentioned previously.

To change the type style, a new character set must be loaded in. You can either specify the name of the file containing the character set you want, or you can select a font while directory entries are printed out one at a time. Once a new character set is loaded in, all subsequently typed characters appear in the new

type style. Whereas The Print Shop offers large characters in a variety of sizes, Page Designer only offers small sized characters in two sizes: 40 or 80 characters per line. The 80 character per line mode basically compresses the characters. While the documentation admits that the 80 characters per line mode looks blurry on the screen, it says nothing about how ugly the compressed characters look on the printed page. I would recommend sticking to the 40 character per line mode if you want legible text.

Special Graphics

A special graphics font can be activated with a control command. This character set contains characters that may be linked together to form pat-

Continued on page 156

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Page Designer Continued from page 154

terns, borders, screen designs, etc. The only problem with linking these characters is that the screen lines are spaced one scan line further apart than they should be. The result is "connected" characters appear disconnected. The only way around this is to continuously use two other commands which move the text cursor one scan line above or below its current position, but this is time-consuming and nerve-racking, especially if you planned to put these characters over a wide area of the screen.

Graphics Mode

Another mode of this pro-

gram allows you to use the joystick to make free-hand drawings on the screen. Line, circle and sphere drawings are supported, but that's all. Furthermore, you can't draw a line, circle or sphere from the top half of the page to the bottom, or vice versa. This could be a serious limitation if you planned to do lots of drawing in the middle of the screen. Using a separate graphics program is of no help in this regard since only one half of the screen is created at a time. You can, of course, switch between top and bottom screens and carefully plan out how they will connect, but his is probably more trouble than it's worth.

Page Designer could have solved these problems by using a scrolling screen that would allow you to scroll up and down the page and draw, type and load screens anywhere along the way. This would have been an excellent and handy feature.

The Printed Page

Figure 1 shows an example of a page created with Page Designer. Note the wide variety of type styles. The small print size enables more text to fit on the page, however it also means that each character is composed of fewer pixels. The result is that Page Designer's graphics seem more "chunky." That is, the individual pixels composing each character are more visible.

Continued on page 160

First Gem Applications From Digital Research Bring Graphic Interface To IBM PC Software Packages

Digital Research Inc. announced its first end-user application programs that take full advantage of the Graphics Environment Manager (GEM) operating system extension-GEM Desktop and GEM Draw. The company also announced two new GEM software applications--GEM Paint and GEM Write--which will be bundled as the GEM Collection with GEM Desktop.

GEM Desktop and GEM Draw bring to the entire line of IBM Personal Computers and compatibles drop-down menus, windows, icons and support for a mouse pointing

device, ideas pioneered on the Xerox Star and popularized on the Apple Lisa and Macintosh. Other GEM-based programs will be announced by Digital Research in the third and fourth quarters of 1985.

"Now that applications with the GEM user interface are available, those who do not want to learn the complicated commands that typify the majority of IBM PC applications will be able to use personal computers," said John Rowley, president of Digital Research. "With these applications, we are beginning to open up the personal computing world to all of business America."

GEM Desktop

GEM Desktop eliminates the need to learn complex operating system commands by replacing them with a visual and intuitive interface. On machines equipped with GEM and GEM Desktop, a graphical representation of a desktop equipped with disks, a waste basket and folders appears. Simply by moving the mouse and clicking the mouse button, or by making simple key strokes, the user can open a file, run a software program, delete a file or do anything else possible under the operating system.

Up to six GEM Desktop accessories, such as a calculator or a clock, can run with other GEM applications.

GEM Collection

For those wishing to try out a range of GEM applications, Digital Research offers the GEM Collection. The GEM Collection includes GEM Desktop, GEM Paint, an onscreen graphics design tool, and GEM Write, a full-function word processor.

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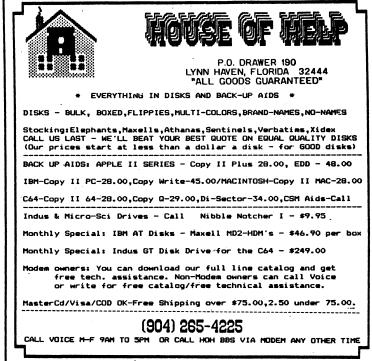
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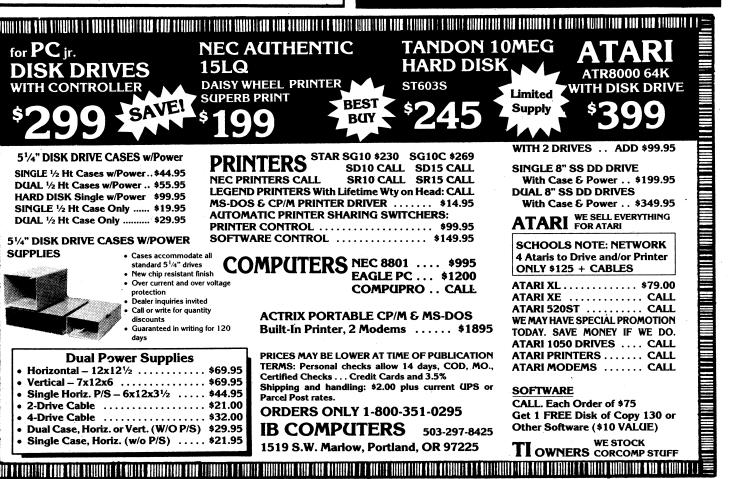
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Page Designer Continued from page 156

Documentation

I was sent "Preliminary Documentation" with this program, which means that I had to figure out how to use several of the commands by myself. Hopefully, the final documentation will be better written and more complete. Since I don't have the actual documentation, I am not including a rating for this category.

Conclusions

Page Designer is a handy

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36C: Centronics Compatible

PC: PC-Type Parallel

utility, particularly useful for merging your own graphics and text and when lower-case characters are essential. For designing signs, greeting cards, stationery, and other items where large, highly readable print is desired, I would still recommend The Print Shop. User-friendliness is where Print Shop really excels over Page Designer. Indeed, the creators of The Print Shop have done such a magnificent job with its user interface that Page Designer seems clumsy, complicated and tedious in comparison. Hence, the neophyte

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Atari user would find himselt much more comfortable using Print Shop than Page Designer. For the more experienced, though, Page Designer has features that make it an attractive package in itself.

Requires:

Atari 400/800/XL/XE 1 Joystick

Program Author:

Dennis Young and Len Dorfam

Price: \$29.95

Warranty:

90 days, free replacement

Manufacturer:

XLENT Software P.O. Box 5228 Springfield, VA 22150

Ratings For Page Designer

*POOR, **FAIR, ***GOOD, **EXCELLENT

Program Design **

Practicality ***

Value ***

Average **1/2

New Modem Continued from page 158

Technical Specifications

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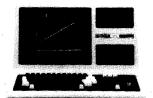
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